

**Environmental Impact Statement  
Scoping Process**

**Summary Report**

**Clinton Power Station, Unit 1  
Clinton, Illinois**

**September 2024**



**U.S. Nuclear Regulatory Commission  
Rockville, Maryland**

## Introduction

By letter dated February 14, 2024 (Agencywide Document Access and Management System (ADAMS) ML24045A024), Constellation Energy Generation, LLC (Constellation) submitted an application for license renewal (LR) of Renewed Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1 to the U.S. Nuclear Regulatory Commission (NRC), pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Title 10 of the *Code of Federal Regulations* (10 CFR) Part 54, “Requirements for Renewal of Operating Licenses for Nuclear Power Plants.”

CPS is located in DeWitt County, approximately 7 miles east of the city of Clinton in east-central Illinois. In its application, Constellation requests license renewal for a period of 20 years beyond the dates when the current renewed facility operating licenses expire. Specifically, the new expiration date, if approved, would be April 17, 2047, for the CPS operating license.

The purpose of this report<sup>1</sup> is to provide a concise summary of the determination of the scope of the NRC staff’s environmental review of this application, incorporating stakeholder input. This report briefly summarizes the issues identified by the environmental scoping process associated with the NRC staff’s review of Constellation’s LR application.

This report is structured in four sections:

- A. CPS Public Scoping Period
- B. Scoping Process and Objective
- C. Summary of Comments Provided
- D. Determinations and Conclusions

### A. CPS Public Scoping Period

#### Background

The Constellation application, and all other public documents relevant to the CPS license renewal, are available in the NRC’s Web-based ADAMS (ML24045A023), which is accessible at <http://www.nrc.gov/reading-rm/adams.html>. Persons who encounter problems in accessing documents in ADAMS should contact the NRC’s Public Document Room (PDR) reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by email at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

For additional information, the NRC staff has made available a website with specific information about the CPS LR application at: <https://www.nrc.gov/reactors/operating/licensing/renewal/applications/clinton.html>. This website includes application information, the licensing review schedule, opportunities for public involvement, project manager information, and other relevant information. In addition, important documents are available at the Federal rulemaking Web site, <https://www.regulations.gov/>, under Docket ID NRC-2024-0046.

As part of its application, Constellation submitted an environmental report (ER) to the NRC (ML24045A279). Constellation prepared the ER in accordance with 10 CFR 51, “Environmental

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<sup>1</sup> The NRC’s requirements for conducting the scoping process and for preparing a scoping summary report are found at 10 CFR 51.29, “Scoping-environmental impact statement and supplement to environmental impact statement.”

Protection Regulations for Domestic Licensing and Related Regulatory Functions,” which contains NRC’s requirements for implementing the National Environmental Policy Act of 1969, as amended (NEPA).

The NRC staff conducted a scoping process to gather information necessary to prepare a plant-specific supplement to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Final Report (NUREG-1437, Revision 2) (2024 LR GEIS) (ML24087A133) to evaluate the environmental impacts of license renewal for CPS. The NRC staff will use the generic findings in the 2024 LR GEIS for Category 1 issues and will address Category 2 issues when preparing its plant-specific supplemental environmental impact statement (EIS). The renewed operating license would authorize the applicant to operate CPS for an additional 20 years beyond the period specified in the current license.

## **B. Scoping Process and Objectives**

On April 29, 2024, the NRC published a notice of intent (NOI) to conduct a scoping process and prepare an EIS in the *Federal Register* (89 FR 33400). The NOI informed stakeholders about the NRC staff’s intent to prepare an EIS and provided the public with an opportunity to participate in the environmental scoping process. The NRC sought public comment on the appropriate scope of the environmental review. The NRC staff requested input from members of the public, by providing scoping comments by May 29, 2024. In addition to written comments, oral comments were recorded at two public meetings. The first public meeting was held in the evening on May 7, 2024, and the second public meeting was held in the afternoon on May 9, 2024. Both meetings were held virtually. All comments, both written and oral, were considered in the agency’s scoping process.

The scoping process provided an opportunity for members of the public to propose environmental issues to be addressed in the EIS and to highlight public concerns and issues. In accordance with 10 CFR 51.29(b), this scoping summary report provides a concise summary of the determinations and conclusions reached as a result of the scoping process. The objectives of the scoping process were to:

- Define the proposed action, which is to be the subject of the EIS;
- Determine the scope of the EIS and identify the significant issues to be analyzed in depth;
- Identify and eliminate from detailed study those issues that are peripheral or are not significant or were covered by prior environmental review;
- Identify any environmental assessments and other EISs that are being or will be prepared that are related to, but are not part of, the scope of the EIS under consideration;
- Identify other environmental review and consultation requirements related to the proposed action;
- Indicate the relationship between the timing of the preparation of the environmental analyses and the Commission’s tentative planning and decision-making schedule;

- Identify any cooperating agencies and, as appropriate, allocate assignments for preparation and schedules for completing the EIS to the NRC and any cooperating agencies; and
- Describe how the EIS will be prepared, including any contractor assistance to be used.

The NRC staff's determinations and conclusions regarding the above objectives are provided in Section D below.

### **C. Summary of Comments Provided**

Table A-1 provides a list of commenters who provided comment submissions (i.e., non-form letter submissions) identified by name, affiliation (if stated), the correspondence identification (ID) number, the comment source, and the ADAMS Accession Number of the source. The staff reviewed each comment submission, including the public scoping meeting transcripts, to identify individual comments. Each comment was marked with a unique identifier consisting of the correspondence ID (specified in Table A-1) and a comment number. For example, Comment 2-1 refers to the first comment within the document provided by correspondence ID 2. This unique identifier allows each comment to be traced back to the source where the comment was identified. Comments were consolidated and categorized according to a resource area or topic. Table A-2 identifies the distribution of comments received by resource area or topic.

A summary of the comments and the NRC staff's responses are provided in Appendix B to this report. Comments were grouped based on being in scope or out of scope, and comments with similar themes were further sub-grouped to capture the resources concerned. Each comment submittal was uniquely identified and, when a submittal addressed multiple issues, the submittal was further divided into separate comments with tracking identifiers.

### **D. Determinations and Conclusions**

#### *(1) Define the proposed action*

The NRC's proposed action in this instance is to determine whether to renew the CPS operating license for an additional 20 years.

#### *(2) Identify the scope of the EIS and the significant issues to be analyzed in the EIS*

The environmental consequences of license renewal include: (1) impacts associated with continued operations and refurbishment activities similar to those that have occurred during the current license term; (2) impacts of various alternatives to the proposed action; (3) impacts from the termination of nuclear power plant operations and decommissioning after the LR term (with emphasis on the incremental effect caused by an additional 20 years of operation); (4) impacts associated with the uranium fuel cycle; (5) impacts of postulated accidents (design basis accidents and severe accidents); (6) cumulative impacts of the proposed action; and (7) resource commitments associated with the proposed action, including unavoidable adverse impacts, the relationship between short-term use and long-term productivity, and irreversible and irretrievable commitment of resources.

The significant issues identified in this report will be considered in the development of the draft EIS, in accordance with 10 CFR 51.29, "Scoping-environmental impact statement and supplement to environmental impact statement", and 10 CFR 51.70, "Draft environmental impact statement-general." The NRC also follows guidance in NUREG-1555, Supplement 1, Revision 2, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal" (ML23201A227) to ensure compliance with all applicable regulations and NRC policies and procedures.

The NRC staff delineated and grouped comments according to resource area/topic (see Appendix B). The comments will be addressed in the EIS, as appropriate, as discussed in Appendix B to this report.

The NRC staff reviewed all comments received and categorized each as general in nature, outside scope (beyond the scope of the LR environmental review), or in-scope (the comment is applicable to the LR environmental review). The NRC staff considered all relevant in-scope comments as part of this review and determined that there were no significant issues identified during the scoping period.

The NRC staff will consider the scoping comments that were submitted. With respect to greenhouse gasses and climate change, the NRC staff will consider, in Chapter 3 of the EIS, the impacts of continued operations on climate change and the impacts of climate change on environmental resources (e.g., air quality, water resources) that may be directly impacted by continued operation during the LR term. Chapter 3 of the EIS will also consider greenhouse gas emissions impacts on climate change from continued operations associated with license renewal.

In addition, the NRC staff will describe, in Chapters 2 and 3 of the EIS, the following topics generally mentioned in the scoping comments:

- Alternatives-No-Action
- Alternatives-System Design
- Ecology-Terrestrial Resources
- Hydrology-Surface Water Resources
- Land Use and Visual Resources
- Meteorology and Air Quality
- Process-Licensing Action
- Socioeconomics
- Support-Licensing Action
- General Environmental Concerns
- Greenhouse Gas Emissions and Climate Change
- Waste Management-Radioactive Waste

Other scoping comments will also be considered, as discussed below.

*(3) Identify and eliminate from detailed study issues which are peripheral or are not significant or which have been covered by prior environmental review*

As noted in the appendices, the NRC staff received several comments that were either general in nature or otherwise beyond the scope of the LR environmental review. These included comments from organizations and individuals generally in support of the CPS license renewal.

Plant-specific design bases are not re-evaluated as part of license renewal. Site-specific environmental conditions are considered when siting nuclear power plants. This includes the consideration of meteorological and hydrologic siting criteria, including Probable Maximum Precipitation criteria, as set forth in 10 CFR Part 100, "Reactor Site Criteria." NRC regulations require that plant structures, systems, and components important to safety be designed to withstand the effects of natural phenomena, such as flooding, without loss of capability to perform safety functions. Further, nuclear power plants are required to operate within technical specifications in accordance with the NRC operating license, including coping with natural phenomena hazards. The NRC conducts safety reviews prior to allowing licensees to make operational changes due to changing environmental conditions.

The NRC staff will not consider or evaluate any issues in the site-specific EIS which do not pertain to the staff's environmental evaluation or are beyond the scope of the LR review. Comments that have been designated as out of scope are identified in Appendix B of this report.

*(4) Identification of related environmental assessments and other EISs*

The NRC has identified an environmental assessment (EA)/finding of no significant impact (FONSI) issued on May 21, 2019, to amend the expiration date of the CPS Facility Operating License No. NPF-62 from September 29, 2026, to April 17, 2027 (ML19046A038). From September 29, 1986, to April 17, 1987, CPS was limited to 5 percent of rated power while operators conducted low-power testing before being issued a full-power operating license on April 17, 1987. The action to amend the expiration date of the license from September 29, 2026, to April 17, 2027, results in the license expiring 40 years from the date of the issuance of the full-power operating license, as is permitted by the NRC's regulations. The completed EA/FONSI will be used in preparation of the draft CPS LR EIS, as appropriate. Additionally, previously completed EISs will be used in the draft CPS LR EIS, as appropriate, including portions of the 1996 LR GEIS (ML040690705, ML040690738), 2013 LR GEIS (ML13107A023), and the 2024 LR GEIS (ML24087A133).

*(5) Other environmental review and consultation requirements*

Concurrent with its NEPA review, the NRC staff is consulting with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act of 1973 to evaluate the potential impacts of the operation of CPS for an additional 20 years on endangered and threatened species and their critical habitat. Consistent with 36 CFR 800.8(c), the staff is also consulting with affected Indian Tribes, the Illinois State Historic Preservation Office, and the Advisory Council on Historic Preservation to fulfill its Section 106 obligations under the National Historic Preservation Act.

*(6) Indicate the relationship between the timing of the preparation of environmental analyses and the Commission's tentative planning and decision-making schedule*

The NRC staff plans to issue a draft EIS for public comment in April 2025. The 45-day comment period will offer an opportunity for participants, such as the applicant; interested Federal, State, and local government agencies; Tribal governments; local organizations; and members of the public to provide further input to the agency's environmental review process. Comments on the draft EIS will be considered in the preparation of the final EIS, which the NRC staff anticipates issuing in October 2025. The NRC staff is completing its safety review and will document findings in a safety evaluation report (SER), which is anticipated in August 2025. The findings in

the EIS and SER will be considerations in the NRC's decision to issue or deny Constellation's request for the license renewal of the CPS license.

*(7) Identification of cooperating agencies*

During the scoping process, the NRC staff did not identify any Federal, State, local or Tribal agencies as cooperating agencies for this EIS.

*(8) Describe how the EIS will be prepared, including any contractor assistance to be used*

Upon completion of the scoping process, the NRC staff will compile its findings in a draft EIS. The draft EIS will be made available for public comment. Once the public comment period is complete, the NRC staff will amend the draft EIS, as appropriate, and will prepare and publish a final EIS. The NRC will then prepare and provide a Record of Decision in accordance with 10 CFR 51.102 and 10 CFR 51.103.

## Appendix A

### List of Commenters

**Table A-1. Individuals Providing Comments During the Scoping Comment Period**

<b>Commenter</b>	<b>Affiliation</b>	<b>Correspondence ID</b>	<b>Comment Source</b>	<b>ADAMS Accession Number</b>
Shofner, Josh		1	Meeting Transcript	ML24135A216
Walker, Mike		2-1	Meeting Transcript	ML24135A217
Baxter, Taylor		2-2	Meeting Transcript	ML24135A217
Matthews, Dan	Dewitt County	2-3	Meeting Transcript	ML24135A217
Hult, Philip	Generation Atomic	2-4	Meeting Transcript	ML24135A217
Petersen, Janice	Clinton Chamber of Commerce	2-5	Meeting Transcript	ML24135A217
Homann, Curt		2-6	Meeting Transcript	ML24135A217
Nettles, Curt	Clinton Community Unit School District (CUSD) 15	3	Email	ML24141A070
Cluver, Rennie	Clinton Community YMCA	4	Email	ML24141A071
McClain, Krystle Z.	U.S. Environmental Protection Agency	5	Email	ML24151A179

**Table A-2. Distribution of Comments by Resource Area or Topic**

<b>Resource Area/Topic</b>	<b>Number of Comments Received</b>
Alternatives-No-Action	1
Alternatives-System Design	1
Ecology-Terrestrial Resources	1
Hydrology-Surface Water Resources	1
Land Use and Visual Resources	1
Meteorology and Air Quality	1
Outside Scope-Emergency Preparedness	2
Outside Scope-Miscellaneous	1
Outside Scope-Safety	3
Process-Licensing Action	3
Socioeconomics	8



Support-Licensing Action	5
General Environmental Concerns	1
Greenhouse Gas Emissions and Climate Change	1
Waste Management-Radioactive Waste	2

## Appendix B

### Analysis of Comments Received During the Scoping Period

#### B.1 Comments on the Resource Areas

##### B.1.1 Comments Concerning Alternatives - No-Action

**Comment Summary:** A commenter requested that the NRC staff thoroughly evaluate the environmental impacts of not renewing the license for CPS, Unit 1, including the associated impacts on greenhouse gas emissions.

Comment: (2-4-2)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the alternatives area and/or supplemental applicable areas.

##### B.1.2 Comments Concerning Alternatives- System Design

**Comment Summary:** The commenter recommended that the draft EIS indicate whether any new buildings are needed and if the applicant would commit to designing buildings to Leadership in Energy and Environmental Design standards.

Comment: (5-12)

**Response:** This comment will be considered as part of the NRC staff's environmental review during the development of the draft EIS within the alternatives area and/or supplemental applicable areas.

##### B.1.3 Comments Concerning Ecology-Terrestrial Resources

**Comment Summary:** In order to support mitigation decisions and Clean Water Act Section 401 Water Quality Certifications for wetlands and streams, the commenter recommended that the draft EIS provide adequate information about the presence of wetlands and streams and discuss any potential impacts to wetlands from refurbishment activities.

Comment: (5-3)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the terrestrial resources and/or supplemental applicable areas.

##### B.1.4 Comments Concerning General Environmental Concerns

**Comment Summary:** The commenter recommended that the NRC staff utilize the following databases to obtain environmental information related to the project area: WATERS (Watershed Assessment, Tracking & Environmental Results System), Envirofacts, EJSCREEN, NEPAassist,

Clean Water Act Section 303(d) List of Impaired Waters, and National Ambient Air Quality Standards status.

Comment: (5-14)

**Response:** This comment will be considered as part of the NRC staff's environmental review during the development of the draft EIS within the applicable areas.

### **B.1.5 Comments Concerning Greenhouse Gas Emissions and Climate Change**

**Comment Summary:** The commenter recommended that the NRC demonstrate compliance with Executive Order 14008. The commenter also recommended the draft EIS describe changing climate conditions and assess how changing climate conditions, such as increased frequency and intensity of large storm events, could impact Clinton Power Station, as well as describe climate resilience and adaptation considerations. The comment identified the National Climate Assessment at <https://nca2023.globalchange.gov/> as a source of information about changing climate conditions.

Comment: (5-6)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS. As part of its environmental review, the NRC staff will consider the impacts of the proposed action on climate change and climate change impacts on environmental resources that are affected by the proposed action. However, the impacts of climate change on operations and safety of the facility are outside the scope of the environmental review.

### **B.1.6 Comments Concerning Hydrology-Surface Water Resources**

**Comment Summary:** With regard to the National Pollutant Discharge Elimination System regulations, the commenter recommended that the draft EIS include a water balance analysis and provide additional information from any available past studies as well as any potential discharges from increased peak storm events.

Comment: (5-4)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the surface water resources and/or supplemental applicable areas.

### **B.1.7 Comments Concerning Land Use and Visual Resources**

**Comment Summary:** The commenter recommended that the draft EIS address siting of potential refurbishment activities and avoid or minimize impacts from use of temporary staging areas or creation of impervious surfaces, if applicable.

Comment: (5-11)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the land use and/or supplemental applicable areas.

### **B.1.8 Comments Concerning Meteorology and Air Quality**

**Comment Summary:** The commenter recommended that the applicant commit to voluntary measures to reduce emissions from any construction emissions. The commenter submitted an enclosure titled, "Construction Emission Control Checklist." The enclosure provides a list of voluntary protective measures that the commenter recommends the applicant consider and commit to, as applicable, in the draft EIS to minimize environmental and human health risks from diesel emissions and fugitive dust from project construction.

Comment: (5-2)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the air quality and/or supplemental applicable areas.

### **B.1.9 Comments Concerning Socioeconomics**

**Comment Summary:** Commenters called attention to the ongoing beneficial economic impacts associated with continued operation of the CPS, Unit 1. These comments suggest that continued operation of CPS under a renewed operating license would result in beneficial economic impacts in the affected area from continued property tax revenues that provide financial support for schools, worker incomes, philanthropic support to local organizations, and recreational opportunities that draw tourists to the area.

Comments: (1-1-1) (2-2-2) (2-2-3) (2-3-1) (2-5-1) (2-6-1) (3-1) (4-2)

**Response:** These comments will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the socioeconomics area and/or supplemental applicable areas.

### **B.1.10 Comments Concerning Process-Licensing Action**

**Comment Summary:** Commenters expressed appreciation for the opportunity to provide comments and recommended that the NRC staff address them when preparing the draft EIS. A commenter also recommended that the draft EIS include copies of coordination letters to relevant Federal and state agencies, as well as the NRC's responses.

Comments: (2-4-1) (5-1) (5-13)

**Response:** Comments specifically pertaining to the environmental scoping process are considered in this report. With respect to the contents of the draft EIS, the public will have an opportunity to comment on its contents after the draft EIS is published. Those comments will then be considered in the final EIS.

### **B.1.11 Comments Concerning Waste Management-Radioactive Waste**

**Comment Summary:** The commenter stated that the draft EIS should indicate if there would be any changes in the generation of radioactive and hazardous waste over the life of the program.

Comments: (5-7) (5-9)

**Response:** This comment will be considered as part of the NRC staff's technical review and analysis during the development of the draft EIS within the waste management and pollution prevention area and/or supplemental applicable areas.

### **B.2 Non-Technical and Comments Outside the Scope of the Environmental Review**

#### **B.2.1 General Comments in Support of the Licensing Action**

**Comment Summary:** Commenters expressed support for license renewal and continued operation of CPS, Unit 1, noting the need for clean, reliable energy, and the applicant's philanthropic initiatives within the community.

Comments: (2-3-2) (2-5-2) (2-6-3) (4-1) (4-3)

**Response:** These comments are outside the scope of the NRC staff's environmental review and will not be discussed in the draft EIS.

#### **B.2.2 Comments Concerning Outside Scope- Emergency Preparedness**

**Comment Summary:** Commenters expressed that emergency preparedness drills conducted in coordination with the CPS helped local agencies to prepare for any potential incidents at the nuclear power plant as well as other emergencies that may occur in the county. Additionally, the city of Clinton benefits from the station's presence through this enhanced preparedness and inter-agency cooperation.

Comments: (2-1-1) (2-2-1)

**Response:** These comments are outside the scope of the NRC staff's environmental review and will not be discussed in the draft EIS.

#### **B.2.3 Comments Concerning Outside Scope- Miscellaneous**

**Comment Summary:** A commenter recommended that the draft EIS should indicate whether and how the applicant plans to transport the spent nuclear fuel for offsite storage.

Comment: (5-10)

**Response:** This comment is outside the scope of the NRC staff's environmental review and will not be discussed in the draft EIS.

#### **B.2.4 Comments Concerning Outside Scope - Safety**

**Comment Summary:** Commenters expressed that they had no safety concerns regarding the nearby presence of CPS. Another commenter recommended that the draft EIS discuss the structural integrity of any discharge structures.

Comments: (2-6-2) (5-8) (5-5)

**Response:** These comments are outside the scope of the NRC staff's environmental review and will not be discussed in the draft EIS.